# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/774,146 | 02/06/2004 | Kerry D. Steele | E-1672 (BA4-215) | 8437 |

| | | | EXAMINER |
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| 21567 | 7590 | 06/06/2006 | SMITH, SHEILA B |

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| ART UNIT | PAPER NUMBER |
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| 2617 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/774,146 | STEELE ET AL. |
| | Examiner | Art Unit | |
| | Sheila B. Smith | 2617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on *14 March 2006*.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17* is/are allowed.

6)☒ Claim(s) *1-5,8-16,18-24 and 27-34* is/are rejected.

7)☒ Claim(s) *6,7,25 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.      Claims 1-5,8-16,18-24,27-34 are rejected under 35 U.S.C. 102(e) as being anticipated by

Ertin et al. (U. S. Patent Number 6,995,655).

*Regarding claim 1,* Ertin et al. discloses essentially all the claimed invention as set fourth

in the instant application, further Ertin et al. discloses a method of simultaneously reading

multiple radio frequency tags, RF tags, and RF reader, in addition Ertin et al. discloses a

communications device identification method comprising: providing identification information

regarding a group of wireless identification devices within a wireless communications range of a

reader (which reads on column 4 lines 39-47);  using the provided identification information,

selecting one of a plurality of different search  procedures for identifying unidentified ones of the

wireless identification devices within the wireless communications range (which reads on

column 4 lines 47-60);  and identifying at least some of the unidentified ones of the wireless

identification devices using the  selected one of the search procedures (which reads on column 5

lines 53-63).

*Regarding claim 2,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses providing the identification information comprises determining a range of identifiers of the wireless identification devices which may be within the wireless communications range (which reads on column 4 lines 47-59).

*Regarding claim 3,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses providing the identification information comprises determining a number of wireless identification devices which may be within the wireless communications range (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 4,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses determining the number comprises calculating a difference between wireless communications devices having minimum and maximum identifiers (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 5,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses determining the number comprises determining using a binary search to identify the wireless communications devices having the minimum and maximum identifiers (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 8,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses an article of manufacture embodying executable instructions

configured to cause processing circuitry to perform the method of the selecting and the

identifying (which reads on column 1 lines 48-67 and column 2 lines 1-46).


*Regarding claim 9,* Ertin et al. discloses everything claimed, as applied above (see claim

1) additionally, Ertin et al. discloses communicating data intermediate identified ones of the

wireless identification devices and the reader (which reads on column 1 lines 48-67 and column

2 lines 1-46).


*Regarding claim 10,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses communicating from at least one of the wireless

identification devices to the reader comprises communicating using backscatter modulation

(which reads on column 1 lines 48-67 and column 2 lines 1-46).


*Regarding claim 11,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the reader and the wireless identification devices are

configured to implement radio frequency identification device (RFID) communications (which

reads on column 1 lines 48-67 and column 2 lines 1-46).


*Regarding claim 12,* Ertinet al. discloses everything claimed, as applied above (see claim

1) additionally, Ertinet al. discloses device identification method comprising: providing a reader

configured to communicate with a plurality of wireless identification devices (which reads on

column 4 lines 39-47); identifying a first of the wireless identification devices within a wireless

communications range of the reader (which reads on column 4 lines 1-27); identifying a second

of the wireless identification devices within the wireless communications range of the reader

(which reads on column 5 lines 1-37); selecting one of a plurality of different search procedures

responsive to the identifying (which reads on column 5 lines 23-47); and identifying at least one

unidentified wireless identification device within the wireless communications range using the

selected one of the search procedures (which reads on column 5 lines 53-67).


   ***Regarding claim 13,*** Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the first and the second of the wireless identification

devices comprise wireless identification devices having respective ones of a minimum and a

maximum identifier (which reads on column 1 lines 48-67 and column 2 lines 1-46).


   ***Regarding claim 14,*** Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses communicating with at least one of the identified

wireless identification devices using the reader after the identifying (which reads on column 1

lines 48-67 and column 2 lines 1-46).


   ***Regarding claim 15,*** Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses one of the search procedures comprises a binary

search procedure, and another of the search procedures comprises a walk-through search

procedure (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 16,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses an article of manufacture embodying executable

instructions configured to cause processing circuitry to perform the method of the identifying

and the selecting (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 18,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses a communications method comprising: providing a

first group of wireless identification devices within a wireless communications range of a reader

at a first moment in time (which reads on column 4 lines 48-67); providing first identification

information regarding the first group (which reads on column 4 lines 38-47); first selecting one

of a plurality of different search procedures for identifying the wireless identification devices of

the first group, wherein the first selecting comprises selecting using the first identification

information (which reads on column 4 lines 48-60); identifying unidentified ones of the wireless

identification devices of the first group using the selected one of the search procedures;

providing a second group of wireless identification devices within the wireless communications

range of the reader at a second moment in time (which reads on column 5 lines 53-67);

providing second identification information regarding the second group; second selecting an

other of the different search procedures using the second identification information; and

identifying unidentified ones of the wireless identification devices of the second group using the

selected other of the search procedures (which reads on column 5 lines 48-63).

*Regarding claim 19,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses communicating data intermediate the reader and identified ones of the wireless identification devices of the first and the second groups (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 20,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses a wireless communications reader comprising: an antenna configured to communicate wireless signals within a wireless communications range (which reads on column 4 lines 48-67); and processing circuitry coupled with the antenna and configured to implement wireless communications with a plurality of wireless identification devices within the wireless communications range via the antenna (which reads on column 4 lines 38-47), to analyze a number of wireless identification devices which may be present within the wireless communications range with respect to a range of identifiers of wireless identification devices which may be present within the communications range (which reads on column 4 lines 48-60), to select one of a plurality of search procedures responsive to the analysis, and to identify at least one of the wireless identification devices within the wireless communications range using the selected search procedure (which reads on column 5 lines 53-67).

*Regarding claim 21,* Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to estimate the number of the wireless identification devices (which reads on column 1 lines 48-67 and column 2 lines 1-46).

***Regarding claim 22,*** Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to identify minimum and maximum ones of the wireless identification devices and to calculate a difference between the minimum and maximum ones of the wireless identification devices to estimate the number (which reads on column 1 lines 48-67 and column 2 lines 1-46).

***Regarding claim 23,*** Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to estimate the range of identifiers of the wireless identification devices (which reads on column 1 lines 48-67 and column 2 lines 1-46).

***Regarding claim 24,*** Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to estimate the range corresponding to minimum and maximum possible values associated with the processing circuitry (which reads on column 1 lines 48-67 and column 2 lines 1-46).

***Regarding claim 27,*** Ertin et al. discloses everything claimed, as applied above (see claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to process backscatter modulation communications received from at least one of the wireless identification devices (which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 28,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the processing circuitry is configured to implement

radio frequency identification device (RFID) communications-using the antenna (which reads on

column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 29,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses a wireless communications system comprising: a

wireless communications reader configured to implement wireless communications within a

wireless communications range (which reads on column 1 lines 48-67); a first group of wireless

identification devices located within the wireless communications range at a first moment in

time; a second group of wireless identification devices located within the wireless

communications range at a second moment in time (which reads on column 2 lines 1-46);

wherein the wireless communications reader is configured to obtain the identity of at least one of

the wireless identification devices of the first group using a first search procedure and to obtain

the identity of at least one of the wireless identification devices of the second group using a

second search procedure different than the first search procedure (which reads on column 1 lines

48-67);  and wherein the wireless communications reader is configured to select the first and the

second search procedures responsive to an analysis of group identification information of

respective ones of the first group and the second group (which reads on column 5 lines 53-67).

*Regarding claim 30,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the wireless communications reader and identified

ones of the wireless identification devices are configured to exchange wireless communications

(which reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 31,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the first search procedure comprises a binary search

procedure and the second search procedure comprises a walk-through search procedure (which

reads on column 1 lines 48-67 and column 2 lines 1-46).

*Regarding claim 32,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses an article of manufacture comprising: a medium

comprising executable instructions configured to cause processing circuitry of a wireless

communications reader to: access information regarding a plurality of wireless identification

devices which may be within a communications range of the wireless communications reader

(which reads on column 1 lines 48-67); select one of a plurality of different search procedures

using the accessed information, wherein the different search procedures comprise procedures for

identifying unidentified ones of the wireless identification devices (which reads on column 1

lines 48-67); and identify unidentified ones of the wireless identification devices using the

selected one of the search procedures (which reads on column 5 lines 53-67).

*Regarding claim 33,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the executable instructions are configured to cause the

processing circuitry to access the information comprising a range of identifiers of the wireless

identification devices and a number of the wireless identification devices (which reads on

column 1 lines 48-67 and column 2 lines 1-46).


*Regarding claim 34,* Ertin et al. discloses everything claimed, as applied above (see

claim 1) additionally, Ertin et al. discloses the executable instructions are configured to cause the

processing circuitry to implement wireless communications with at least one of the identified

wireless identification devices (which reads on column 1 lines 48-67 and column 2 lines 1-46).


### Allowable Subject Matter

2.      Claims 6,7,25,26 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.


3.      Claim 17 allowed.

### Response to Arguments

4.      Applicant's arguments with respect to claims 1-34 have been considered but are moot in

view of the new ground(s) of rejection.

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Smith
May 30, 2006

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER